Extended Artist Statement

My current body of work uses pattern to explore relationships between visual art and sound. Rhythm, vibration, visual noise, patterns of interference, and shifting color fields are some of the formal qualities I use to express this idea. I work in several artistic disciplines including weaving, printmaking, digital imaging, animation, and sound. Each medium I use offers different strategies and outcomes that affect the evolution of the work and its process. Processes of layering, interlacing, and repetition are practiced to varying degrees in each piece to achieve complexity and to create cohesion among artworks.

Working in stages and layers is fundamental to my practice. For some media, such as weaving, working in steps is essential; with other media, dividing the process into parts can introduce more opportunities to make creative decisions and add greater complexity to the work. For example, my current series of relief print collages presents the outcomes of working within a mutable system. The work begins with a woodblock that is scored by a laser cutter. A digital file of parallel lines informs the laser where to cut into the wood’s surface. Intervals between the lines are carved away by hand to produce a relief pattern of stripes. Next, the woodblock returns to the laser cutter where individual squares and rectangles of varying dimension are cut out from the larger piece. These steps are repeated on new woodblocks with variations in the initial spacing of parallel lines to produce a variety of modules with different spacing of stripes. When the laser cutting is complete, the separate square and rectangular modules are assembled together on a press bed to form a larger changeable matrix. The composited configuration is printed with different inks on various papers before being reconfigured and printed from again. Next, the printed impressions are transformed by hand cutting and collaging onto a fresh sheet of paper. The collage reforms the image by establishing new areas of juxtaposition, in some works through subtle exchanges of color variation, and in other works through dramatic effects of interlaced patterning.

Working in stages and layers also applies to my digital images and animations. Creating a digital collage involves a recursive process of editing an image through one or more iPhone apps multiple times in succession. The image source can come from a photo of a handmade print or weaving, or from a previous digital manipulation. Each image produced can be layered with
another and manipulated again, or further transformed into an animation. In some cases, sequential changes to a digital image become separate frames of a video work. In other instances, similar or duplicate images are used to perform as separate layers in an animation, where each animated layer acts as a field of pattern to produce hypnotic moiré effects when shifted across one another.

Moiré and interference patterns are a prominent formal investigation in my work. The visual effect of moiré occurs when two similar or identical patterns layer together to produce a secondary superimposed image. In my recent screen print series, I achieve said effect using a simple stripe pattern. The work is created by layering together multiple variations of the stripe pattern while slightly offsetting each layer from one another. Each stripe pattern variation is created through a photosensitive process where light is exposed to a screen coated with photo-emulsion. A striped stencil used to block light determines the resulting pattern on the screen. Variations in the pattern are the result of double exposing the stencil to the screen. Adjusting the placement of the striped stencil between the first and second exposure produces a unique intersection and interference pattern of the stripes. The initial stripe pattern along with the different resulting interference patterns are printed as layers in succession using varying color gradients to create transitional shifts and swells over the image. Differences in color hue, value, and intensity are juxtaposed intuitively to achieve other optical effects in combination with the moiré patterns. After printing, my process continues with hand cutting, rearranging, and collaging the printed elements to add further complexity and balance to complete each artwork.

The equivalent to moiré pattern in sound is an auditory perception known as binaural beats. A beat frequency is perceived by a listener when two different tonal frequencies in close proximity (example: 100 Hertz and 110 Hertz) are played simultaneously; one frequency is played to one ear while the other is played to another. The beat frequency perceived by the listener is the difference between the two frequencies (10 Hertz for the above example). Moiré patterns operate in a similar way to produce a composite pattern from two similar or identical patterns shifted slightly out of degree with one another.

Binaural beats are employed in my work to accompany the visual presentation of both moving and static artworks. A sound environment of binaural beating is achieved by playing a fixed two-channel audio piece into a space. The audio piece stands alone from the visual artwork, but can be experienced simultaneously. Due to the physics of any room, the perceived
beating of the two separate tones occurs at specific coordinates within the space where each tone’s unique displacement of air intersects with the other. This effect is transformed by sweeping the frequency of both or either tone. Changing the two frequencies together while maintaining their margin of difference will move the perceived beat frequency to new coordinates within the room; whereas sweeping the two frequencies while also changing their difference margin will additionally affect the perceived beat frequency.

Patterns of interference and binaural beats are examined further through immersive video installation. A three-channel video projection synced with three-channel audio explores chance occurrences of flickering image and sound. Set in a darkened room, audio and video pulse together according to set increments. Each wall-sized projection contains fixed intervals of flashing and static imagery. The length of interval and frequency of strobing varies among each video, as well as the tonal frequency of audio accompanying each projection is comparably different by a small margin of Hertz. The total duration of each video/soundtrack before it loops is also varied. Together the aural videos, looped independently of one another and played back simultaneously, create an environment of perceived chance, randomness, and order that emerges organically in viewing the installation. As the strobing intervals of each sonic projection interlace and intersect one another, moments of synchronicity and binaural activity ensue. The overall effect can be jolting, nauseating, or entrancing depending on the viewer.

The varied forms of presentation in my work are given consideration to provide complexity and context to each piece. Non-traditional fine art forms such as sound and video installation are treated with flexibility to interact effectively within diverse spatial environments. Logistics of media requirements and placement affect the overall presentation, setting, and pathways of traffic. The flow of audience is guided both by architectural structures that are fixed or created within the space as well as by thoughtful arrangement of artwork, sound, and lighting. Light is used as an aesthetic tool to alter the presence and mood of an immersive environment or traditional setting. The differences between warm versus cold, tungsten versus fluorescent, and spotlight versus diffused light can have dramatic effects on the presentation of traditional artworks. Conversely, a dark room with light strobing projections will incite different evocations than a dark room illuminated with diffused red light and backlit display boxes.

The formal devices used to present physical artworks are also carefully considered. Choices of finishing and presentation are made to inform the context of the materials used within
the work. For example, mounting a paper work onto a panel structure makes reference to the context of painting, whereas framing an unmounted piece behind glass references traditions of drawing and printmaking. I affix collage printed works to panel to negate the inherent ephemeral nature of paper, and to provide support to the work as a structural art object. Another example of antithetical ephemera is evident in backlit display boxes that feature digital imagery. The light box recreates the experience of viewing a digital file on a computer monitor or mobile display, meanwhile framing and solidifying the work as a physically made object. Expressing a digital image as a physical thing is also employed in weavings, where a pattern is first produced digitally before being executed by hand on a loom.

Experimentation and cross breeding of media is important in my practice for both arriving at new possibilities as well as creating tangible links between separate bodies of work. Each artwork goes through multiple stages of development and reconfiguration to arrive at an unforeseen outcome that is rich with complexity. I explore how separate layers of visual information interact and merge to create a composite, just as I investigate how comingling frequencies shape a tonal environment. In my work, I have found that simple systems, when manipulated through processes of layering and repetition, can produce a stunning array of visual and audio effects. Being open and playful while working in steps is important to my practice, because it provides opportunities to transform aesthetic direction and intention. I view my artworks as stages of progress in my personal perception of the world and I hope to offer this excitement of discovery to the viewer of my work.